U.S. Patent Application No. 08/923,461 Attorney's Docket No. RIC-96-153

subgroups of optical signals traveling in a first direction and a second set of subgroups of optical signals traveling in a second direction;

a first plurality of fine wavelength division multiplexers configured to support unidirectional traffic comprising the first set of subgroups of optical signals;

a second plurality of fine wavelength division demultiplexers configured to support uni-directional traffic comprising the second set of subgroups of optical signals;

a first plurality of optical line amplifiers, each of the first plurality of optical line amplifiers configured to amplify a different respective subgroup of the first set of subgroups of optical signals; and

a second plurality of optical line amplifiers, each of the second plurality of optical line amplifiers configured to amplify a different respective subgroup of the second set of subgroups of optical signals.

Please add the following claims:

78. (New) The system of claim 77, wherein the first set of subgroups of optical signals corresponds to a first set of subwindows within the operating window.

79. (New) The system of claim 78, wherein each of the first set of subwindows corresponds

to different channels of the set of multiple channels.

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80. (New) The system of claim 78, wherein the second set of subgroups of optical signals corresponds to a second set of subwindows within the operating window, wherein the first set of subwindows is different than the second set of subwindows.

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81. (New) A system for equalizing optical gain across a set of channels within an operating window of a fiber communication network, comprising:

a coarse wavelength division multiplexing/demultiplexing unit configured to support bi-directional optical signal traffic within the operating window, the operating window comprising a first set of subwindows traveling in a first direction and a second set of subwindows traveling in a second direction, the first set of subwindows comprising different channels of the set of channels than the second set of subwindows;

a first plurality of fine wavelength division multiplexers configured to support unidirectional traffic comprising the first set of subwindows;

a second plurality of fine wavelength division demultiplexers configured to support uni-directional traffic comprising the second set of subwindows;

a first plurality of optical line amplifiers, each of the first plurality of optical line amplifiers configured to amplify a different respective subwindow of the first set of subwindows traveling in the first direction; and

a second plurality of optical line amplifiers, each of the second plurality of optical line amplifiers configured to amplify a different respective subwindow of the second set of subwindows traveling in the second direction,

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